

EXTRUSION APPARATUS FOR THREE-DIMENSIONAL MODELING

ABSTRACT OF THE DISCLOSURE

Disclosed is a multi-tip extrusion apparatus and design methodology whereby a single extrusion head having approximately co-planar, fixed-position dispensing tips is used in a three-dimensional modeling machine to deposit multiple types of materials from distinct material supply sources. The tips are spaced apart a distance great enough so that a road of material extruded by a leading one of the tips will cool and shrink from the plane of the tips so that it is not smeared by contact with a trailing one of the tips.

G:\GMC\PATFILE\S697-12 51\APP WPD

卷之三